

***NATIONAL WEATHER SERVICE INSTRUCTION 10-1716
NOVEMBER 14, 2002***

***Operations and Services
Dissemination Policy, NWSPD 10-17
NOAA WEATHER WIRE SERVICE SYSTEM MANAGEMENT***

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

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Signed by 10/31/02
John McNulty, Jr. Date
Director, Office of Operational
Systems

NOAA Weather Wire Service System Management

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1. Document Purpose. This Procedure describes how the National Weather Service (NWS) manages, operates and maintains the NOAA Weather Wire Service (NWWS).

2. Description. The NWWS employs a two-way satellite network for collecting and disseminating information from all NWS Weather Forecast Offices (WFO) and national centers to outside users throughout the United States.

2.1 Public Dissemination. The NWWS is the primary means by which this vital information is delivered to mass news disseminators and public safety agencies.

2.2 Warnings and Forecasts. Weather warnings, forecasts, and other meteorological information are transmitted in a plain language format.

3. Organizational Responsibilities. This section describes the responsibilities of the NWS Headquarters, Regional Headquarters, and field offices for NWWS. Additional information on NWWS responsibilities can be found in the NWS Policy Directive (NWSPD) 10-17, *Operations and Services Dissemination Policy* and NWS Procedural Directive Instruction 10-1715, *NOAA Weather Wire Service Dissemination*.

3.1 NWS Headquarters (HQ). The Assistant Administrator (AA) for Weather Services has overall responsibility for the NWWS program.

3.1.1 Office of Operational Systems (OPS). OPS provides staff assistance to the AA for Weather Services concerning NWWS program management and configuration control. Dissemination Systems Branch (OPS17) has overall responsibility for the following:

- a. Program management of the overall NWWS telecommunications system.
- b. Management of the contract with the NWWS system contractor.
- c. Processing of change requests and configuration control management at each NWS field site and Systems Operation Center.
- d. Design, development, maintenance, and validation of databases for all sites.

3.1.2 Office of Climate, Water and Weather Services (OS). OS is responsible for establishing policy regarding the broadcast program content of NWWS in accordance with NWSPD 10-17, *Dissemination Policy*. OS is responsible for the definition of data message format and content, generic code format and usage, and operational backup procedures.

3.2 Regional Headquarters (RH). It is the responsibility of RHs to coordinate, with the field sites for installation problems or operational changes and to forward to the HQ NWWS Contracting Officer's Technical Representative (COTR) in OPS17, any systemic maintenance or end-user problems that cannot be resolved at the local or regional level.

RHs validate field requirements for new or updated data to be placed on NWWS and forward requests to HQ by initiating Requests for Change (RC). RHs assist HQ and the field in troubleshooting data issues.

3.3 Field Offices. The NWS field offices are responsible, in accordance with predetermined schedules and procedures, for preparation and issuance of the products available on the NWWS. Field offices are the main interface with the external end-user community. The twenty up-link sites are responsible for monitoring their product stream and reporting system outages to the system contractor.

3.4 National Centers. National Centers require prior approval from HQ on any new products for NWWS.

4. Broadcast Service Area. Addressed in NWSI 10-1715, *NOAA Weather Wire Service Dissemination*.

5. Products. Most products for weather warnings, forecasts, and other meteorological information are transmitted in a plain language format. Products are disseminated to outside users via IP broadcast at an output rate of 64 kilo-bits per second (kbps). The end-user receives these data by means of a very small aperture terminal (VSAT) satellite receiver that utilizes a 1.8 meter dish antenna.

5.1 Product Policy. OS, in coordination with the RHs, establishes the policies regarding all products transmitted on the NWWS (NWSI 10-1715, *NOAA Weather Wire Service Dissemination*). These policies pertain to product type, content, and format. Any requests to add, delete, or change the official set of products transmitted on the NWWS shall be governed by the NWS Configuration Management Data Review Group using these established policies. This section documents the broad policies pertaining to NWWS products.

5.2 Product Format. Products transmitted on the NWWS shall be, in general, alphanumeric and in plain language format so the information within the product can be easily understood by the general public. NWWS products include, but may not be limited to, weather and flood warnings, watches, statements, and forecasts.

5.3 Product Origination. Products transmitted on the NWWS originate from NWS offices, WFOs, WFO Regional Forecast Centers (RFCs) and National Centers and also from state agencies when appropriate agreements (see appendix A) have been established between the NWS and the state. NWWS also receives products from the U.S. Geological Survey's Earthquake Center. OS will establish the format of all specific NWWS products and ensure the consistent use of established formats (NWSI 10-1701, *Text Product Formats and Codes*).

6. NWWS Network Costs and Accessibility. This section outlines the NWS policy on cost and access to the NWWS.

6.1 National Weather Service. NWWS receives products from the product sites at a rate of 9.6 kbps. Collection of products and satellite uplink is performed at twenty sites equipped with 2-way transmit/receive capability (the 2-way sites are located at the 13 WFO/RFC, 6 National Centers, and 1 WFO). Products are received from the satellite at Master ground Station # 1 in Alexandria, VA, delivered to the contractor's Message Processing Center (MPC) in Chantilly, VA, and broadcast back via satellite to users from Master Ground Station # 2 in Ft. Meade, MD. The broadcast data rate is 64 kbps. Most products are sent twice through two satellite VSAT uplink sites to ensure receipt if one site goes down. Additionally, NWWS receives backup support from the AWIPS Network Control Facility in Silver Spring, MD, for priority 1 weather warnings by uplinking these products on the NWWS. Any product duplicates are removed from the NWWS data stream at MPC.

6.2 State Agencies. It is the policy of the NWS that a state agency (non-NWS) will be designated as the official NWWS data exchange agency.

In a large number of states, the designated agency will be the State Police. In other states, it may be the Highway Department, Office of Emergency Services, or some other agency with weather-related interests (Hawaii is the only exception; not having a NWWS system). It is the policy of the NWS that a formal agreement with the specific state agency be reached regarding this data exchange arrangement. The agreement form to be used between the NWS and designated state agency is shown in Appendix A.

The designated state agency will receive NWWS information by means of a dedicated receive-only NWWS satellite receiver and distribute this information to other appropriate agencies within its jurisdiction, and will, where appropriate, provide data to the NWS via a dedicated or dial-up telecommunications connection. This connection will be used by the state to provide the NWS with important local weather information (e.g., road condition reports, severe weather reports, etc.).

This policy specifies the NWS will fund the entire cost of equipment installation and operation for the NWWS receive-only satellite earth station to be located on the state agency premises. The states are required to pay only for their monthly telecommunications (i.e., TELCO) charges to send data to the NWS, and for any special equipment (e.g., modems, printers, etc.) they may need to send their data or to internally display the data they receive.

6.3 End-Users. Under the terms of the NWWS contract, the end-users of the NWWS, such as mass news disseminators, private companies, private forecasters, other Federal agencies, local governments, etc., will deal directly with the system contractor.

7. Support Services. The Telecommunication Operations Center (W/OCIO1) has responsibility for the overall management of satellite and telecommunication interfaces.

8. NWWS Maintenance. To be provided by the contractor in accordance with instruction sections 3.1.3 and 6.3 herein.

APPENDIX A

**U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Telecommunications and Dissemination Branch
Silver Spring, MD 20910**

Agreement: NOAA Weather Wire Service (NWWS) Data Exchange Between the National Weather Service and Designated State Agencies

Whereas the National Weather Service (NWS) of the Department of Commerce distributes weather reports, warnings, forecasts, etc., over the NWWS for the public interest, convenience, and safety, and whereas the state/commonwealth of _____ has an interest and need to receive NWWS information for the use of public safety agencies within the state, whereas the _____ may have access to weather information of importance and interest to the NWS, the NWS and the _____ hereby agree to the following terms and conditions:

1. The NWS shall:
 - (a) Pay all acquisition, installation, and maintenance costs for the necessary satellite data receive-only equipment for the designated state/commonwealth agency.
 - (b) Transmit NWWS data to the designated agency via the NWS provided satellite data receiving equipment.
 - (c) Provide required assistance to the agency in understanding and interpreting the information provided.
2. The Designated State/Commonwealth agency shall:
 - (a) Transmit special weather information (e.g., road conditions, severe weather reports, flooding reports, etc.) to the NWS via a state-provided telecommunications connection to a designated NWS site. All such information transmitted shall utilize formats and protocols specified by the NWS.
 - (b) Receive NWWS data via the Government-provided receive only satellite equipment.
 - (c) Assume full responsibility for the necessary internal data distribution and any intrastate agency agreements for data distribution, and hold the Government and its officers harmless from any damage which may arise from the use thereof.
 - (d) Provide any terminals, interfaces, cabling, etc., needed to output, print, or further distribute information received from the satellite equipment.

- (e) Not establish a routine public service using the information from the NWWS.
3. This agreement is for an indefinite period and may be canceled by either party upon thirty (30) days written notice.
4. The designated NWS offices (primary and back-up) to which the
_____ shall transmit weather information are:

_____ (Primary NWS Office)
_____ (Back-up NWS Office)
5. EFFECTIVE DATE: This Agreement shall become effective on the last date shown below when executed by the parties hereto.

STATE AGENCY

UNITED STATES OF AMERICA

Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service

By _____
(Signature)

By _____
(Signature)

TITLE: _____

TITLE: Chief, Dissemination Systems Branch
Office of Operational Systems
National Weather Service

DATE: _____

DATE: _____

AGREEMENT NO. _____

